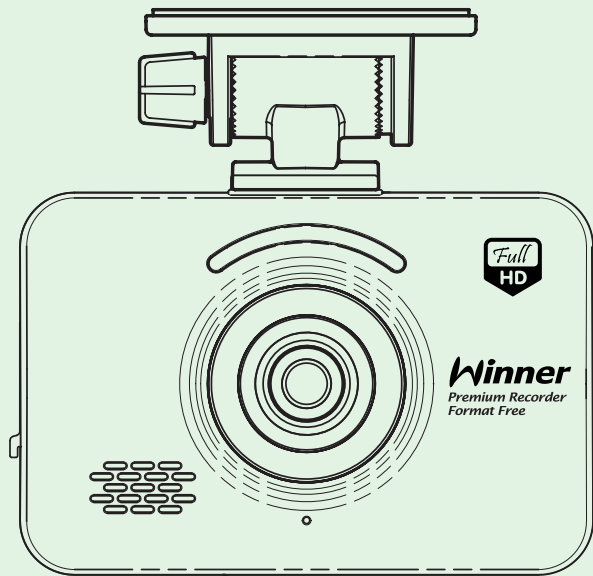


WINYCAM Vehicle Drive Recorder

Winner

User Manual

www.winycam-eng.com



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1. Safety Precautions

Caution on Operation and Storage

- Do not operate the product during driving. It may cause accident.
- The product must be installed at a point which would not obstruct the driver's view.
- Do not allow unauthorized disassembly or alteration to the product. It may cause malfunction, and the consequent product damage will not be covered under the warranty.
- If the product is damaged or power is cut off by a serious accident, the product may not be able to record such event
- Always keep the windshield clean to enable normal recording.
- Since the product is purpose to record video data during driving, video quality may be deteriorated when in/out the tunnel, and at night or by contrast and backlight.
- Contaminated camera lens may deteriorate the video quality. Keep the lens clean.
- Do not place the product under direct sunlight or inside the closed vehicle as it may cause malfunction.
- Do not use chemicals or detergent to clean the product. Clean gently with soft cloth.
- Use of the product at temperature below -20°C or above 70°C may cause malfunction or breakdown. (This caution should be applied when product is unused.)
- Do not use the product in places in high temperature/humidity.
- Do not exert excessive force to the product (especially to LCD buttons and to bracket) as it may cause breakdown.
- Operate the product for 3-5 minutes to check for correct recording, before each use.
- Prolonged exposure to sunlight and high temperature in the summer may cause malfunction.
- Do not turn off power, or remove the SD card during firmware upgrading as it may cause malfunction.
- Do not touch a cigar lighter cable with wet hand as it may cause electric shock.
- Do not use a damaged cigar lighter cable as it may cause electric shock or fire.
- Do not place the cigar lighter cable in near heating devices.
- Do not leave the product connected to the cigar lighter without using for a long period of time. Remove the cable from the product.
- Insert the cigar lighter securely.
- Do not bend or pull the cigar lighter cable by excessive force, or place heavy objects on the cable.
(It may damage the cord and as a result it may cause electric shock or fire.)
- Do not touch the LCD excessive force as it may cause malfunction.

Caution on SD Card

- Because an SD card is consumables, if it is used for a long time, you may lose the data or may not record due to an error, so please check it periodically.
- When the product is in recording or the power is on, do not eject the SD card forcibly. It may cause a failure of the SD card and data loss.
- If temperature gets too high in the vehicle, data storing may be disabled, or data may be damaged. Park your vehicle in the shade in the summer.
- When identify the car's accident or damage, please keep the SD card separately. Due to overwrite, important data may be deleted.
- When turn off the power of the body and remove the SD card before LED is turned off, the last recording file may not be saved, so please be careful.
- When turn off the power of the body and remove the SD card before LED is turned off, the last recording file may not be saved, so please be careful.
- When driving a vehicle, do not remove the SD card. Make sure to remove it safely when a vehicle is in parking or stop.
- After turning on the power, make sure that it is in normal operation.
- Please note that the warranty period of an SD card is six (6) months, and replace it at the time of more than six (6) months. Please purchase and use SD Card that manufacture recommended specification.
- The SD card randomly purchased other than the one we provide, shall be excluded from the warranty, and we shall not take any responsibility for loss and damage of the data recorded in the SD card in any case.

2. Before Use

- Thank you for purchasing Winner
- This User Manual contains important information about the proper use and cautions in use of the product. Please read carefully before use.
- Winner is an auxiliary product to alert users for safe driving and prevent accidents, by recording video during driving. Also purpose for evidence of an accident.
- Winner does not however guarantee that all accidents are recorded. Minor shock may not detect sensor to record.
- WinyTechnology shall not be liable for any loss or damage to data or to the product which may be caused by accident or impact.
- All rights vested in the design and software of Winner are the property of Winy Technology Co., Ltd. and protected by the Copyright Law.
- Winner may change without notice for further function improvement.
- This User Manual is published based on the current state of the product, and may contain typographical errors or omissions.
- Contents of this User Manual may be modified, changed or supplemented without notice for further improvement.

2-1. Product Feature

• High Quality Lens and High Image Quality Resolution support

- Front 5 Mega Pixel / Rear 2 Mega Pixel image sensor
- Wide mega lens
- FHD(1920×1080) High Image Quality Resolution and total 50fps(Front 20 + Rear 30).

• Various Recording Function and Video Data Acknowledgement

- Touch LCD display apply, recording image and recorded image can be confirmed on LCD
- Constant(Normal), Manual, Event, Motion and auto change to Parking recording mode
- Driving records can be stored with GPS data. (optional)
- G sensor built-in Automatic parking recording mode change and event recording mode.
- External video output. (Real-time video image can be checked on another monitor)
- Configuration setting is available on LCD menu.
- PC viewer program are provided to change various setting values and map data can be checked when using GPS. (In the general video player (e.g. Windows media player), recorded video can be played)
- SD card can be formatted as the product itself, without connecting to a PC.
- Each capacity of a constant(normal)/ event/ motion folder can be set in PC Viewer

• High Quality Voice Record and Voice Guidance

- Operating instructions service by voice guidance
- Voice recording On/Off function and speaker output On/Off function
- High performance microphone built-in

• Back-up battery and vehicle constant power discharge protection function

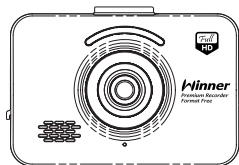
- Stored recorded image safety by built-in high-capacity capacitor when power is off
- Vehicle constant power discharge protection function (Selectable ON/OFF on viewer, Not required another equipment for this function)
Consume less than 2.5mA when power shutdown (Based on 12V)
- When using vehicle constant power discharge protection functions, If user vehicle voltage is 12V and the voltage of less than 11.8V is maintained for more than 5 minutes the product power will be shuts-off (Note: Shutdown time depend on the Type of vehicle and condition.)

• Other

- Soft look and emotional design. (easy removable body)
- Security LED light are built-in front body (LED Lighting function On/Off can be set in PC viewer / LCD menu)

2-2. Package

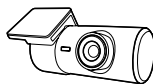
Standard Package



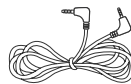
Winner Body



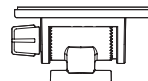
Cigar Lighter



Rear Camera



Rear Camera
Video Cable



Bracket



Micro SD card

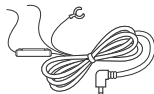


SD card Adaptor



Cable Clip

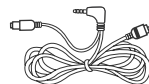
Option Accessories



Fuse Cable



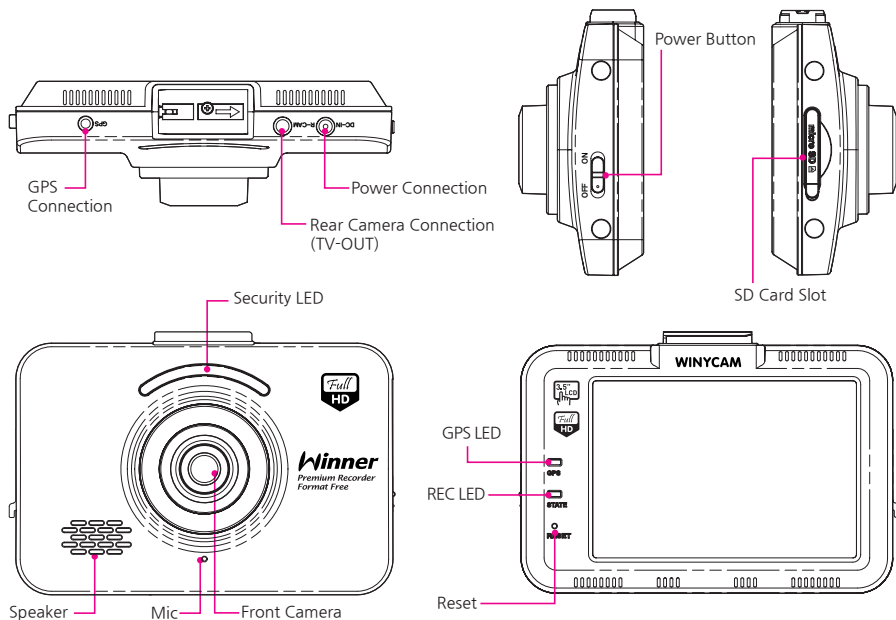
GPS Module



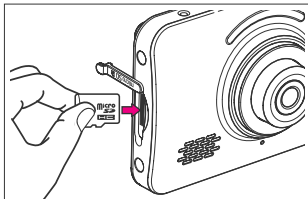
Video Splitter Cable
(Y-Type)

- The packaged product picture of the user manual may differ from the actual product.
- The video cable can be purchased separately and used after verifying the PLUG Pin specification of Navigation AV IN.
- Video input type is different and check the user manual of monitor.

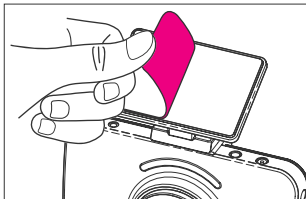
2-3. Product Parts



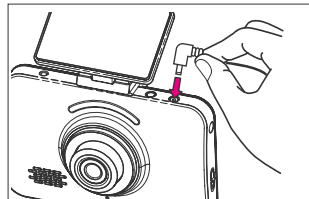
3-1. Front Camera Installation



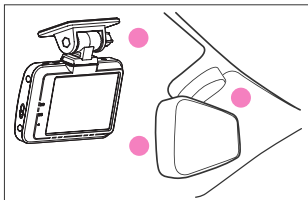
1. Insert Micro SD card to Winner SD card slot.
(Check the SD card direction)



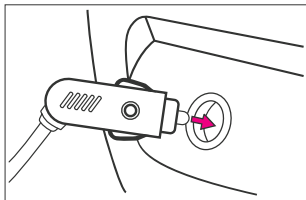
2. Remove the protect sticker.



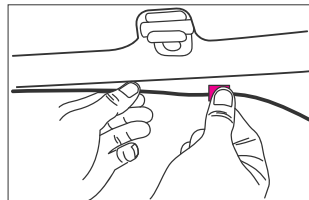
3. Connect Cigar lighter cable to Power connection of product.



4. Attach the Winner in place on the top of front windshield or middle of left and right of the mirror.



5. Connect cigar lighter to a cigar socket.

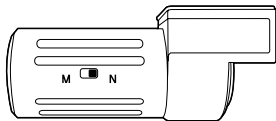


6. Arrange a power cable.

3-2. Rear Camera Installation

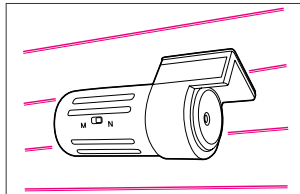
1. Please power off a vehicle and Winner before installation.

N(Normal), M(Reverse of Left, Right)



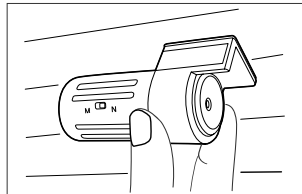
The default is N(Normal).
Please power off Winner When flip on switch.

2. Install a rear camera



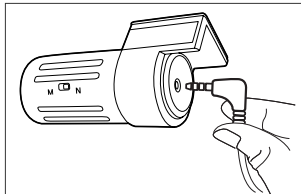
Remove a protect sticker and attach a rear camera in proper location in windshield.

3. Adjust a rear camera angle



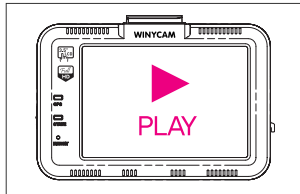
Adjust a camera angle and fix it. To adjust the angle, the horizon is seen above the right center of the screen.

4. Connect video cable



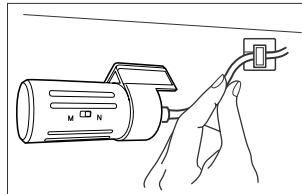
Connect a rear camera cable to rear camera connection slot and to connect the R-CAM terminal on the main body.

5. Check an operation



Power on Winner and check to playback a REC video correctly.

6. Arrange a front/rear camera cable

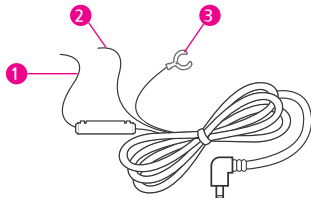


After checking recording operation, well-arrange a cable.

If you embed cable to vehicle wall, please check cable connection. Also after embedded double-check if Winner can record properly.

• Fuse Cable Installation

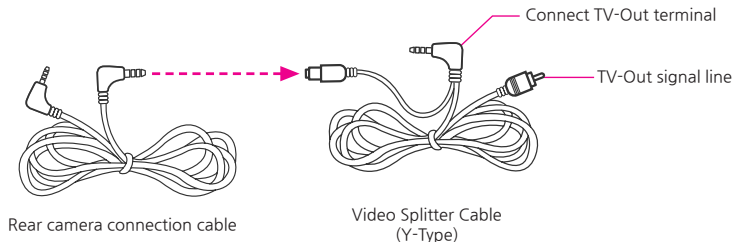
1. How to install a Fuse Cable



Fuse cable has 3 lines.
(When use constant power discharge protection function)

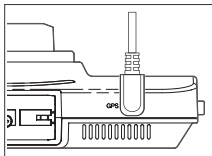
- ❶ Battery Line : Connect to Emergency light
- ❷ ACC Line : Connect to Fuse Power
- ❸ Ground Line : GND

2. How to connect Video Splitter & Rear camera Cable (TV-OUT)

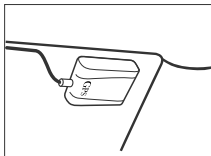


3-3. GPS / TV-OUT Cable Installation

► External GPS Installation

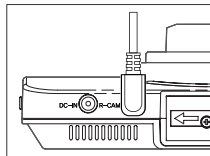


Connect External GPS to GPS connection on Winner body.



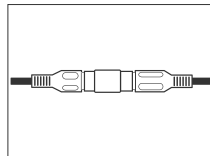
Attach GPS module at well visual place and tidy up a cable.

► TV OUT Cable Installation



Connect a TV-Out cable to the Video splitter cable(Y-Type) on a Winner body.

(Please refer 10P)



Connect a TV-Out cable to AV-IN jack your vehicle navigation.

⚠ Caution on GPS Installation

- GPS module may be affected by main body or by other electronic devices if it is too close each other. Keep a distance as much as possible.
- The receiving signal may become poor depending on the climate, satellite status and geography in the neighborhood.
- The receiving signal may become poor if the windshield is heavy sun-coated or fixed with metallic materials.

⚠ Caution on TV - OUT Connection

- When connecting to your vehicle navigation, you need an applied vehicle navigation video cable.
- With a specific vehicle navigation, installation may be restricted, and/or extra service charge may be incurred.
- Connect to body after checking the location of each connection. Wrong connection may cause malfunction, and the consequent product damage will not be covered under the warranty.

3-4. How to record

- 1. Record** : Winner is automatically boot at power on, and a constant(normal) recording starts as an initial recording mode.
- 2. Recording Mode** : it is classified into driving recording mode and parking (motion) recording mode.
- 3. Recording Method** : it is classified into a Constant(normal) recording, event recording, motion recording.

※ For automatic recording and manual recording methods, please refer the below table.

REC Mode	REC Method	Auto REC Mode	REC Time
Driving Mode	Constant(normal) REC	-	Memory save
	Event REC	In G-sensor detect shock	Including before 10 sec Event/Motion detect
Parking (Motion) Mode	Motion REC	-	
	Event REC	In G-sensor detect shock	

- ※ After changed to Parking mode, LCD will be on for 30sec nevertheless you set screen saving time as 30se/60sec/always.
- ※ When turned to "Parking Mode" G-sensor sensitivity will be more sensitive than driving mode.

3-5. LED Operation

Item	CH	Front LED	Rear LED			
			REC LED	GPS LED		
				Normal (NO GPS)	GPS Connection	
			GPS ON		GPS OFF	
Booting	-	ON	Red ON	Red ON		
FW update	-	ON	Red ON	Red ON		
Continuous / Event REC Standby (N)	1CH	1sec ON / 1sec OFF	Red ON 0.5 / OFF 2.5 sec	OFF	Green ON	Orange On (Green/Red)
	2CH		Green ON 0.5 / OFF 2.5 sec			
In detect a Shock (E)	1CH	0.5sec ON / 0.5sec OFF	Red ON 0.5 / OFF 0.5 sec			
	2CH		Green ON 0.5 / OFF 0.5 sec			
Parking REC (P)	1CH	0.25sec ON / 0.25sec OFF	Red/Green flashing interval at 0.5 sec			
	2CH					
Parking REC standby	1CH	5 LED flashing interval 0.5 sec to right and left	Red/Green flashing interval at 1.5 sec			
	2CH					
No micro SD Card (including an error)	-	OFF	OFF			

※ GPS Icon : GPS Icon : w/o GPS : Grey, w/ GPS : white

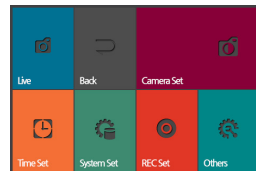
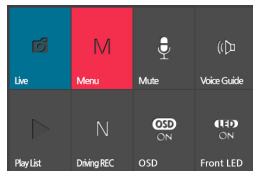
3-6. Voice Guide

Situation	Voice Guide
Remove SD card / SD card Error	“ Please check your SD card. ”
Firmware Update Start	“ The firmware update is starting. ”
Firmware Update Completed	“ The firmware update has been completed. ”
Constant (Normal) Recording Start (In booting)	“ Constant Recording will start. ”
* Event Recording Start (In booting)	“ Event Recording will start. ”
Parking Recording start	“ Parking Recording will start. ”
Recording end	“ The Recording will end. ”
Alarm tone in a Rear Camera disconnect (the error for 2CH REC)	“ Ding-Dong ”

※ Only when event REC mode is set in the configuration, the voice guiding "event recording will start" will announce

3-7. LCD Configuration

All configuration can be set in LCD menu.



	Menu	Function
Quick Menu	Live	Live Image
	Menu	Setting Menu
	Mute	Voice REC ON/OFF
	Voice Guide	Speaker ON/OFF
	Play List	Playback List
	Driving/Parking REC	N(Driving), P(Parking) REC
	OSD	OSD On/Off
	Front LED	LED On/Off
Time Set	Time Set	Set Time on Winner
	Standard Time Set	Set Standard Time
	Summer Time	Set Summer Time
System Set	Cut Off Voltage	Set voltage for car constant power discharge
	Auto LCD Off	Normally off after 30sec / on 60sec
	TV-OUT	Set TV out format (OFF/NTSC)
	High Temp Cutoff	Set High Temperature Cut off
	Speaker Volume	Set Speaker Volume

	Menu	Function
REC Set	Driving/Event REC	Set REC Mode
	Front Video Quality	Set Front Video Quality
	Rear Video Quality	Set Rear Video Quality
	Drive REC Time	Memory Capacity Saving
	REC CH	Set REC Channel
	Mic Volume	Set REC Volume
	Motion Level	Set Motion Sensor Level
	Shock Level(N)	Set Shock Sensor Level (Driving)
	Shock Level(P)	Set Shock Sensor Level (Parking)
Others	System Info	Display System Information
	Memory Adjustment	Adjust REC Folder Capacity Rate
	Touch Calibration	Calibrate Touch Screen
	SD Card Format	Format Micro SD Card
	Factory Init	Initialize Configuration
Camera Set	Camera Set	Adjust Brightness, Contrast, Chroma on Camera

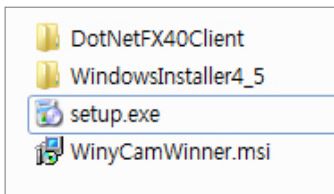
3-8. PC Original Viewer Program Installation

1. System Requirements

- Windows XP(32bit), Windows Vista(32bit), Windows7(32/64bit), Windows8(32/64bit)
- Pentium4 2.8GHz & RAM over 1GB.
- Display monitor resolution: 1024 X 768
- DirectX Support (WPF)

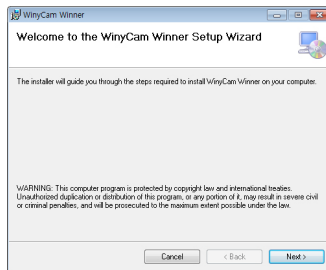
2. Install

- Download the latest Winy BB Viewer from our website (<http://www.winycam-eng.com>)
- If you run “setup.exe”, Winy BB Viewer will be installed
- And then, installation will be continued according to the installation sequence of setup dialog box.

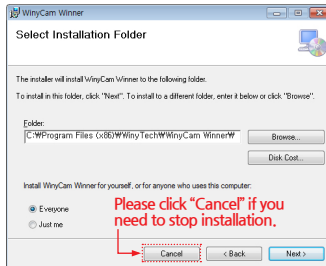


※ Installation may take long depend on PC Usage environment.

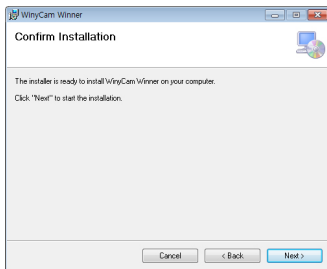
1. NEXT



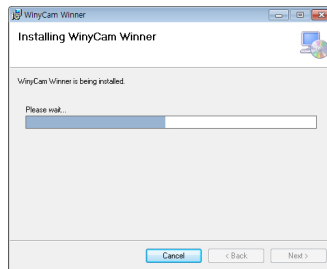
2. Select file location and click "Next"



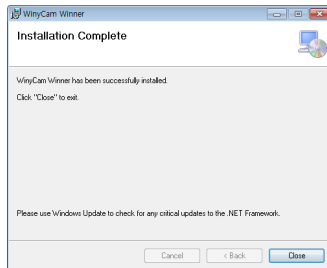
3. NEXT



4. Installing



5. Complete installation

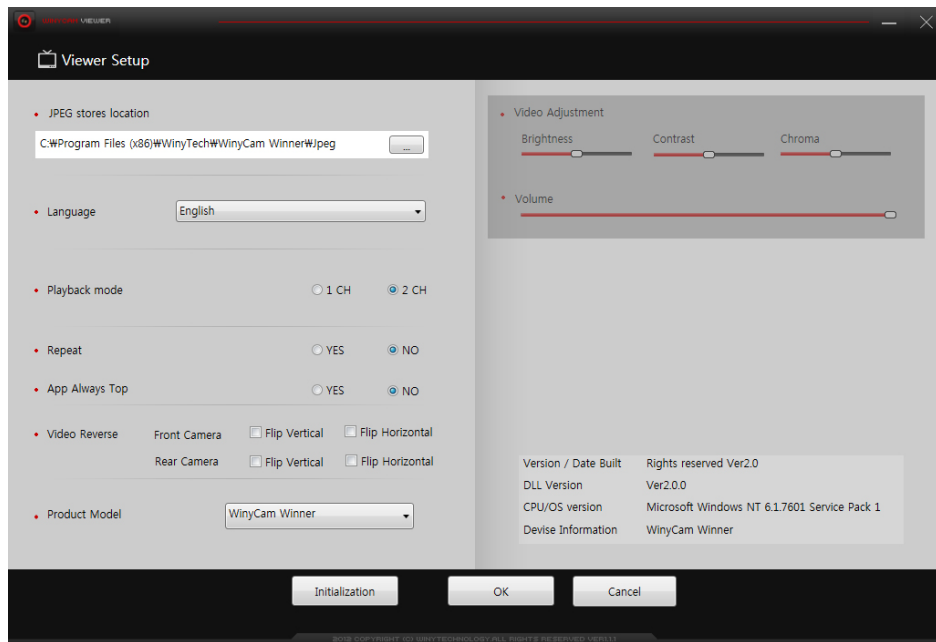


3-9. PC Original Viewer - Screen Configuration



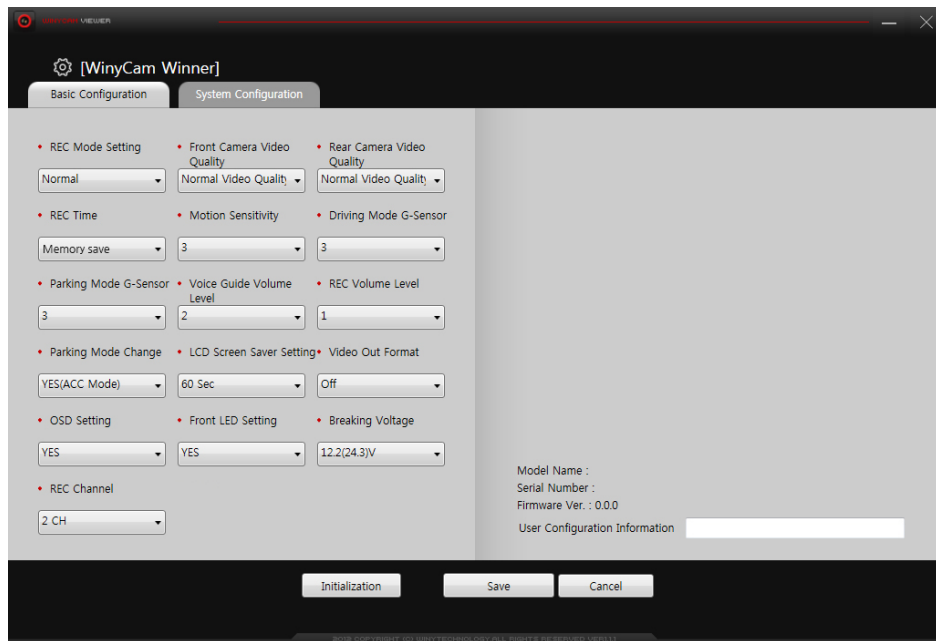
Item	Function	Item	Function
①	1CH / 2CH select screen	⑩	Fast-Rewind
②	Viewer Configuration	⑪	Playback or Pause
③	System Configuration	⑫	Stop
④	Print	⑬	Fast-Forward
⑤	Screen Capture	⑭	File Skip
⑥	Zoom	⑮	Control Volume
⑦	Play List / Map Button	⑯	Total File Time / Playback Time
⑧	Playback File Location	⑰	Brightness / Contrast
⑨	REC file list / Map Display	⑱	GPS signal condition
⑩	Playback Video Image	⑲	Driving Speed
⑪	Playback Control	⑳	Latitude / Longitude
⑫	Full Screen	㉑	G-sensor Information
⑬	Flip Horizontal	㉒	Split Image
⑭	Flip Vertical		
⑮	File Skip Back		

3-10. PC Original Viewer - Viewer Configuration



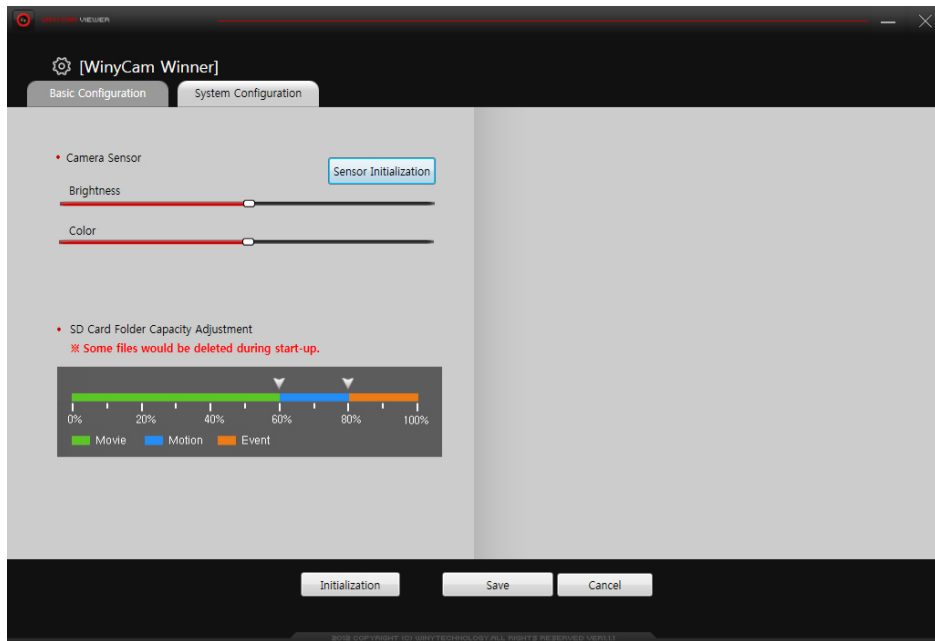
Item	Function
JPEG stores location	Set location for captured JPEG image.
Language	Select language.
Playback Mode	Select display channel.
Repeat	Select repeated playback.
App Always Top	Select App is always the top of another window.
Video Reverse	Video can reverse from side to side and up and down
Product Model	Select the model.
Video Adjustment	Control playback speed
Volume	Control recording volume level

3-11. PC Original Viewer - Configuration 1



Item	Function
REC Mode Setting	Select the recording mode
Front Camera Video Quality	Select video quality in a front camera
Rear Camera Video Quality	Select video quality in a rear camera
REC Time	Select recording time for each file
Motion Sensitivity	Select a motion sensitivity level during parking mode (Level 1 is the most sensitive)
Driving Mode G-Sensor	Select a shock sensor sensitivity level on normal mode
Parking Mode G-Sensor	Select a shock sensor sensitivity level on parking mode
Voice Guide Volume Level	Select voice guide volume level
REC Volume Level	Select a recording auto level
Parking Mode Change	Select a parking mode auto-change function
LCD Screen Saver Setting	Select LCD screen saver function
Video-Out Format	Select TV-Out format
OSD Setting	Select OSD out on LCD
Front LED Setting	Select front security LED function
Breaking Voltage	Select a breaking voltage for a constant power discharge production function
REC Channel	Select a recording channel

3-11. PC Original Viewer - Configuration 2



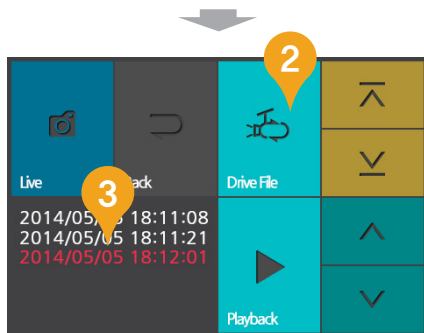
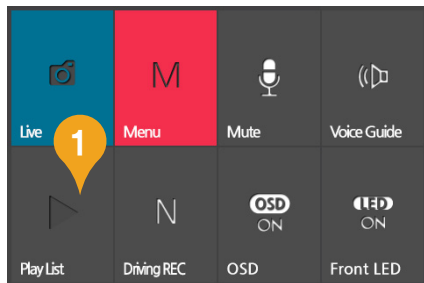
Item	Function
Camera Sensor	Select Brightness, Chroma. Back to default value after click sensor initialization
SD Card Folder Capacity Adjustment	Select the capacity of each recording mode in SD card

3-12. Configuration Default Setting

Item	Setting Value
REC Mode	Normal REC
Front Camera Video Quality	Normal Video Quality
Rear Camera Video Quality	Normal Video Quality
REC Time (each file)	Memory save
Motion Sensitive level	3
Driving Mode G-sensor	3
Parking Mode G-sensor	3
Voice Guide Volume Level	2
Audio REC Volume	1
Parking Mode Change	Manual
LCD Screen Saver	30 sec
TV-Out Format	OFF
OSD Out	YES
Front LED Output	YES
Breaking Voltage	22.2(24.3)V

Item		Setting Value
Record Channel		2CH
Camera Sensor	Brightness	Middle
	Color	60
SD Card Folder Capacity Adjustment(%)	Constant(normal)	20
	Motion	20
	Event	30

3-13. Playback (Vehicle Drive Recorder)



NO.	Item	Display	Description
1	Playback	Icon	Display REC List
2	Normal / Event / Motion	Tab	Each REC file list display tab
3	REC File list	List	REC File list that is selected tab
4	Playback REC	Window	REC video playback window
5	LIVE	Button	Back to list
6	Front / Rear	Button	Toggle Front / Rear video display
7	Former File	Button	Playback Former file
8	Playback	Button	Playback REC file
9	Next File	Button	Playback Next file
10	Back	Button	Back to list tab



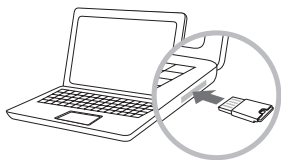
3-14. Playback (General video player)

1) Remove a SD Card from Winner

Open a SD Card slot cover and press softly, then a SD Card can be removed easily.

2) Connect a SD Card to PC

Insert a SD card to SD Card Reader or to adapter, and connect it to PC.



3) Playback

Open a removal disc, you can see each folders. And click files to playback which is stored in each folders.



- infx : Constant(normal) record
- moexx : Motion record which is detected by motion detection sensor. (Parking mode)
- evtxx : Event record which is detected a shock by shock sensor.

GPS Information is displayed in the original viewer.



You can check only front REC when playing by standard video player.

3-15. Playback (PC original viewer)

1~2) Same method to playback as a general video player.

3) Original Viewer Program

Click icon for the original viewer



4) Find a REC file location

Click "FILE LOCATION" in original viewer on upper right. Choose file location, video file list will be shown



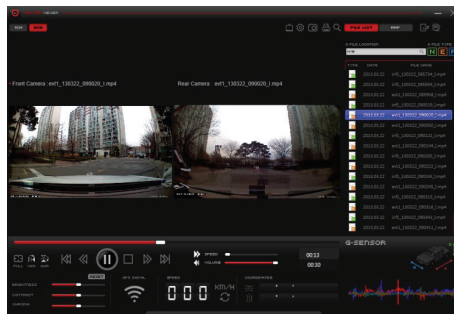
5) Playback

※ Click

N : Constant(normal) REC file list

E : Event REC file list

P : Parking REC file list



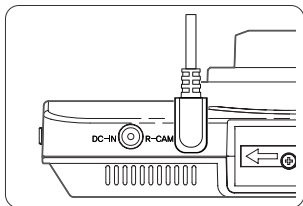
3-16. Playback (TV / Vehicle Navigation)

1) Connect TV Out cable

Connect TV Out cable to TV-OUT terminal on the product.

Connect TV Out cable to video input terminal on the TV / Vehicle navigation.

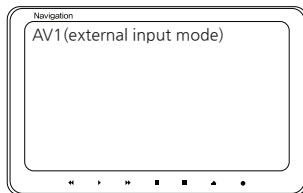
(TV Out cable : Option)



2) Set the video input mode

Set the video input mode on TV / Vehicle navigation first and playback video for real-time monitoring.

Real-time recording image ONLY.



Note

- Available only TV / Vehicle navigation has external input terminal.
Please check the TV / Vehicle navigation supplier for an external monitor cable.
- Mode change method is different for each modes, please refer user manual of TV / Vehicle navigation.
If remove or insert TV Out cable during recording, recording will end and start reboot.

3-17. How to display Front / Rear screen

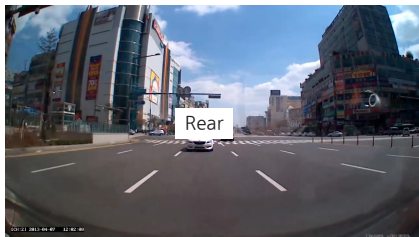
- When 2CH is setting, if you touch right upper screen ($\frac{1}{4}$ of whole screen), LCD screen will be changed automatically Front/Rear, Rear/Front, only Front, only Rear.
- Only LCD Screen looks different, 2CH images will be recorded when rear camera is connected.



Front/Rear LCD Screen



Rear/Front LCD Screen



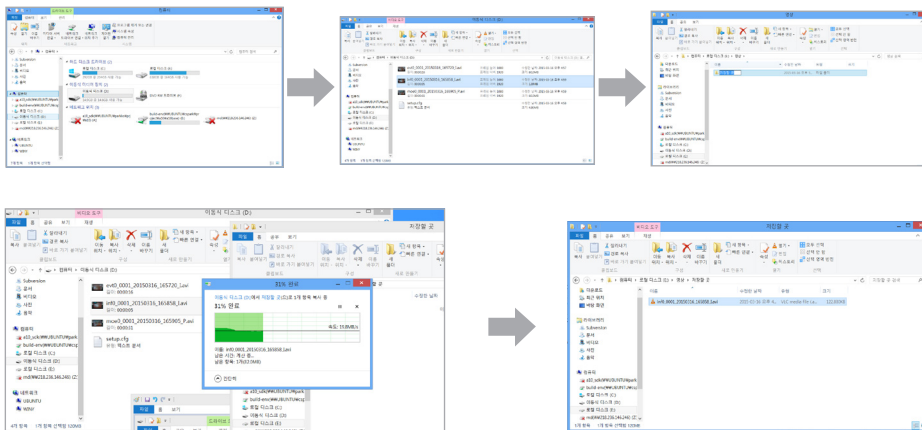
Rear LCD Screen



Front LCD Screen

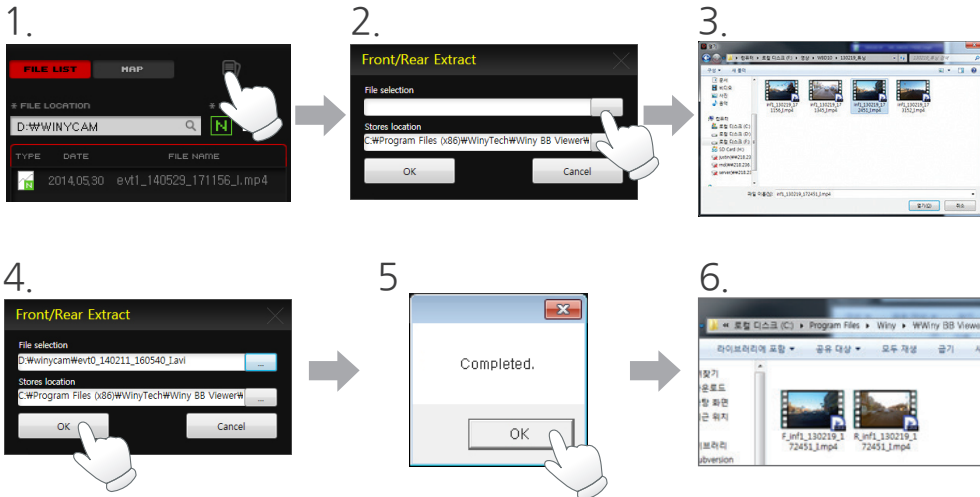
3-18. To save video file on your PC

- 1) Enter to removal disc after insert SD card to your PC.
- 2) Go to the folder where recorded video files are stored.
- 3) Create the new folder in same location.
- 4) Drag the particular file to the new file to copy.
(If you drag a folder, the whole folder will be copied.)



3-19. How to separate video

1. Press "Front & Rear Extract" button on the original PC viewer program.
2. Select a video file to separate and click "OK" button.
3. Stored separated file in "C:\Program Files\WBlackBoxViewer\BlackBoxViewer\Video"



3-20. Firmware Upgrade

▪ Auto Firmware Upgrade

- 1) Remove the SD card from Winner after turning off the power completely.
- 2) Backup all files that are stored in the files to your PC.
- 3) Download the latest firmware from our website (<http://www.winycam-eng.com>) and copy to a SD card.
- 4) Insert the SD card to Winner. After power ON then firmware will be updated automatically.
- 5) During firmware updating, a voice guide will be announced and updating message will be displayed on LCD.
- 6) When the firmware update is completed, Winner will be initialized and a voice guide will be announced

3-21. SD card format & Set breaking voltage

1. SD Card format

- Format a Micro SD Card on the device. (Menu > Others > SD Card Format)
- The setting value will last when SD Card Format menu is used.

2. How to install Constant power discharge protection function

- This device has the built-in vehicle constant power discharge protection function, and therefore does not require an extra device to cut off constant power. Set a breaking voltage value on Winner or PC viewer. (Please note to set value based on a type of vehicle or An age of vehicle.)

1) Configuration

Menu > System Set > Cut Off Voltage

2) PC Viewer Program

Configuration > Breaking Voltage

There are some differences depend on a type of vehicle and vehicle age.
(Cut off Voltage :

11.4(23.1) / 11.6 (23.4) / 11.8(23.7) / 12.0(24.0) / 12.2(24.3) / Off)

※ If vehicle detect lower voltage than your set voltage, the power will not cut off soon. (When cat detect set voltage around for 5min to 5min 30sec, voltage will be cut off.

3-22. REC Time

► Default set

CH	Video Quality	Camera	16GB			32GB		
			Normal (60%)	Motion (20%)	Event (20%)	Normal (60%)	Motion (20%)	Event (20%)
1CH	Super High	Front	96	39	58	196	78	117
	High	Front	118	47	71	239	96	143
	Normal	Front	151	61	91	307	123	184
2CH	Super High	Front/Rear	62	25	37	127	51	76
	High	Front/Rear	76	30	45	154	61	92
	Normal	Front/Rear	96	39	58	196	78	117

(Unit : Minute)



- By time : When the SD card is full, the oldest file will be automatically deleted.
- By mode : Total record files are stored by your setting rate on "SD card Folder Capacity Adjustment". When memory is full on a particular recording mode, the oldest file will be automatically deleted on particular recording mode. Stored file may also be deleted.

3-23. Specification

Item	Specification	Item	Specification
CPU	ARM Cortex A8 core	G-Sensor	3D Shock Sensor
Flash Memory	128MByte NAND Flash	Video Format	AVI
RAM	256MByte DDR3 (128Mbyte x 2)	Video Output	NTSC / PAL
Recording Channel	2 Channel	Voice Recording	Built-in high sensitive microphone
Camera	Front : 5M Pixel / Rear : 2M Pixel COMS image sensor	Voice Guidance	Built-in speaker
Image Quality	Front : FHD (1920 x 1080) Rear : HD (1280 x 720)	Video Compression	H.264 / AVC
FPS	20 FPS / 30 FPS	Memory	microSD Card (up to 64GB opt.)
View angel	Front : 92(H) x 67(V) x 120(D) Rear : 103(H) x 60(V) x 130(D)	High Temperature Cut-off	Yes
Display (LCD)	3.5" TFT LCD with TSP (320 x 480)	Breaking Voltage	(Option) : Disable, 11.4V(23.1), 11.6V(23.4), 11.8V(23.7), 12.0V(24.0), 12.2V(24.3)
GPS	External GPS Module (Option)		
Power Input	DC 12V~24V	Operating Temperature	-20℃ ~+70℃
Battery	Super Capacitor	Storage Temperature	-20℃ ~+85℃

4. FAQ

1. **Power is not turned on.**
※ Check once again if the power cable is properly connected. If the problem is not solved, please contact manufacture.
2. **The map is not shown when a video is played on a PC original viewer program.**
※ Check your Internet connection. Check if your Internet Explorer is v7.0 or higher.
3. **Power is connected, but LED is not lightning.**
※ Check if the power cable is connected properly. Then if still LED dose not lightning, the product or the SD card may be defective. Please contact manufacture.
4. **GPS signal dose not recognize. (GPS is sold separately.)**
※ GPS signal reception may be interrupted temporarily depending on the environment and locations. Drive your vehicle to other location where GPS signal reception is abled. Please wait 3-5 minutes in the GPS signal reception area. If the signal still dose not recognized, please contact manufacture
5. **The product does not recognize the SD card.**
※ Remove the SD card from Winner after power OFF, and check for any foreign material or abnormality around the connecting terminal. Format the SD card and try again. If the SD card is old, please replace to a new one.

•Precaution before use



Note

1. Please check for any defect on the product before installation. The Company shall not take responsibility for any cost or expense incurred as a result of the failure to check before installation.
2. If installation was held at a service center other than those designated by the Company, the Company shall not take a responsibility for cost or expense charged at such center.
3. If the constant power protect function is set 'OFF', monitoring during parking will be performed only for a certain period of time. If the vehicle battery voltage is lowered for self-protection, power to the device may be disconnected even in the Parking Mode disabling the recording.
4. The Micro SD card is a consumable. Use of an aged SD card may cause error. Please replace on a regular basis.
5. When a vehicle accident occurred, turn off power of the product immediately, remove the SD card and save the accident file on your PC. If the file is erased due to the times away, the Company shall not take responsible.

Warranty

1. The products are manufactured through the strict quality control and inspection process.
2. The defect occurring in normal use of user within the warranty period will be repaired free of charge.
3. If the warranty period has passed, we will repair by paid charge.
4. Please take this "Warrantee" when you request repair.
5. Please keep this "Warrantee" because we will not be able to re-issue this warrantee note.

Model Name	Winner	Product	Vehicle Drive Recorder / Rear Camera		
Serial No		Purchase date	YY	MM	DD
Customer		TEL			
Address					
Purchase from		TEL			

■ Warranty Details (Conditions)

1. Free Service

Product : 1 Year from purchase date.

Micro SD Card : 6 months from purchase date

(if purchase date is not confirmed, it should be counted from manufacture date of SD card.)

2. Paid Service

1) If the warranty period has passed.

2) If a failures caused by carelessness using (drop, flooding, shock, breakage, excessive operation)

3) If failures caused by natural disasters (fire, lightning, flood damage, etc.

4) Failures caused by the malfunction of power in use and connected equipment.



Please keep this "Warrantee" because we will not be able to re-issue this warrantee note.

WinyTechnology Co., Ltd.

www.winycam-eng.com